



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060

(804) 527-5020 Fax (804) 527-5106

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Molly Joseph Ward  
Secretary of Natural Resources

David K. Paylor  
Director

Michael P. Murphy  
Regional Director

September 24, 2014

Ms. Laura Beauchesne  
Technical Director  
Bear Island Paper WB LLC  
10026 Old Ridge Road  
Ashland, VA 23005

Location: Ashland, VA  
Registration No. 50840

Dear Ms. Beauchesne,

Attached is a Title V permit renewal to operate Bear Island Paper WB LLC pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Bear Island Paper WB LLC of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director  
Department of Environmental Quality  
P. O. Box 1105  
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call this office at (804) 527-5020.

Sincerely,



James E. Kyle, P.E.  
Air Permit Manager

Attachment: Permit

cc: Director, OAPP (electronic file transmission)  
Manager, Data Analysis (electronic file transmission)  
Chief, Air Enforcement Branch (3AT13), U.S. EPA, Region III  
Manager/Inspector, Air Compliance



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## Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80 Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Bear Island Paper WB LLC
Facility Name:	Bear Island Paper WB LLC
Facility Location:	10026 Old Ridge Road Ashland, Virginia
Registration Number:	50840
Permit Number:	PRO-50840

September 24, 2014

Effective Date

September 23, 2019

Expiration Date

Kyle Ivar Winter P.E.

Deputy Regional Director

23 SEPTEMBER 2014

Signature Date

Table of Contents, pages 2-3  
Permit Conditions, pages 4-37

## Table of Contents

I.	Facility Information.....	4
II.	Emission Units.....	5-8
III.	Fuel Burning Equipment Requirements - (B&W Combination Boiler-Unit Ref. #2).....	9
	A. Limitations.....	9
	B. Monitoring.....	10
	C. Recordkeeping.....	10
IV.	Fuel Burning Equipment Requirements - (Package Boiler-Unit Ref. #3).....	11
	A. Limitations.....	11
	B. Monitoring.....	13
	C. Recordkeeping.....	14
	D. Testing.....	14
	E. Reporting.....	14
V.	Process Equipment Requirements (Wood Yard-Unit Ref. #4).....	15
	A. Limitations.....	15
	B. Monitoring.....	16
	C. Recordkeeping.....	16
VI.	Process Equipment Requirements (Thermomechanical Pulp Mill-Unit Ref. #1).....	17
	A. Limitations.....	17
	B. Monitoring.....	18
	C. Recordkeeping.....	18
	D. Compliance Assurance Monitoring (CAM).....	19
VII.	Process Equipment Requirements (Waste Water Treatment Plant-Unit Ref. #5).....	22
	A. Limitations.....	22
	B. Monitoring.....	22
	C. Recordkeeping.....	23
VIII.	Process Equipment Requirements (Paper Mill/Machine-Unit Ref. #6).....	23
	A. Limitations.....	23
	B. Monitoring.....	23
	C. Recordkeeping.....	23
IX.	Process Equipment Requirements (Recycle Plant-Unit Ref. #7).....	23
	A. Limitations.....	23
X.	Process Equipment Requirements (Parts Washer - Non-Halogenated Cold Solvent Degreasers Unit Ref. #8).....	- 24
	A. Limitations, Monitoring, Recordkeeping, Testing and Reporting.....	24
XI.	Process Equipment Requirements (Industrial Landfill - Unit Ref. #9).....	25
	A. Limitations.....	25
XII.	Process Equipment Requirements (Emergency Diesel Fire Pump - Unit Ref. #10).....	25
	A. Limitations.....	25

XIII.	Facility Wide Conditions .....	25
A.	Limitations .....	25
B.	Recordkeeping .....	26
C.	Testing.....	27
XIV	Insignificant Emission Units .....	27
XV.	Compliance Plan.....	28
XVI.	Permit Shield & Inapplicable Requirements .....	28
XVII.	General Conditions .....	29
A.	Federal Enforceability .....	29
B.	Permit Expiration .....	29
C.	Recordkeeping and Reporting.....	29
D.	Annual Compliance Certification .....	30
E.	Permit Deviation Reporting .....	31
F.	Failure/Malfunction Reporting .....	31
G.	Severability .....	32
H.	Duty to Comply .....	32
I.	Need to Halt or Reduce Activity not a Defense .....	32
J.	Permit Modification.....	32
K.	Property Rights.....	32
L.	Duty to Submit Information .....	33
M.	Duty to Pay Permit Fees .....	33
N.	Fugitive Dust Emission Standards .....	33
O.	Startup, Shutdown, and Malfunction .....	34
P.	Alternative Operating Scenarios .....	34
Q.	Inspection and Entry Requirements .....	34
R.	Reopening For Cause .....	34
S.	Permit Availability .....	35
T.	Transfer of Permits.....	35
U.	Malfunction as an Affirmative Defense.....	35
V.	Permit Revocation or Termination for Cause.....	36
W.	Duty to Supplement or Correct Application .....	36
X.	Stratospheric Ozone Protection .....	36
Y.	Accidental Release Prevention .....	36
Z.	Changes to Permits for Emissions Trading.....	36
AA.	Emissions Trading.....	37
XVIII.	State-Only Enforceable Requirements .....	37

## **I. Facility Information**

### **Permittee**

Bear Island Paper WB LLC  
10026 Old Ridge Road  
Ashland, Va. 23005

### **Responsible Official**

Scott Wilson  
General Manager  
(804) 227-4001

### **Facility**

#### **Contact person**

Laura Beauchesne  
Technical Director  
(804) 227-4043

NATS Facility Identification Number: 322122

**County-Plant Identification Number:** 085-0042

**Facility Description:** SIC Code: 2621- Pulp Mill establishments primarily engage in manufacturing pulp from wood or from other materials, such as rags, linters, wastepaper, and straw. Establishments engaged in integrating logging and pulp mill operations are classified according to the primary products shipped. Establishments engaged in integrated operations of producing pulp and manufacturing paper, paperboard, or products therefore are classified in Industry 2621 if primarily shipping paper or paper products.

The facility manufactures newsprint. The facility mixes newsprint made from trees with recycled paper. Bear Island Paper WB LLC manufacturing facility consists of the following: wood yard, thermomechanical paper mill (TMP), combination boiler, package boiler, wastewater treatment plant, recycle plant, paper mill and supporting operations.

The facility is a Title V major source of Particulate Matter (PM), PM-10, PM 2.5, NOx, SO<sub>2</sub>, CO, and VOC. The source is located in an attainment area for all pollutants.

A RACT Consent Agreement was established on July 12, 1996.

The Department of Environmental Quality (DEQ) issued an administrative amendment to the State Operating Permit on December 10, 2013 (50840-18) that superseded the State Operating Permit issued on August 24, 2012 (50840-17). DEQ issued a Title V permit on January 1, 2005 and it expired on January 1, 2010. Bear Island Paper WB LLC (Bear Island) submitted a renewal application dated June 24, 2009 that was received by DEQ on June 26, 2009. DEQ determined the application was timely and complete on August 19, 2009.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment: COMBINATION BOILER (B&amp;W) - Unit Ref. #2 - MACT (40 CFR 63, Subpart DDDDD)</b>							
2 (PH-1A)	PHS-1	Babcock & Wilcox Combination Boiler Coal – primary fuel	243 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	State Operating Permit (SOP) 12/10/13
2 (PH-1B)	PHS-1	Babcock & Wilcox Combination Boiler Bark/Paper Sludge/Wood Chips/Combustion – primary fuel	147.4 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	SOP 12/10/13
2 (PH-1C)	PHS-1	Babcock & Wilcox Combination Boiler Number 2 Fuel Oil - secondary fuel	243 mmBtu/hr	Multi-cyclone, Electrostatic Precipitator and low sulfur fuels not to exceed 0.2%	PHC-1A PHC -1B	PM, PM-10, SO <sub>2</sub>	SOP 12/10/13
2 (PH-1ABC)	PHS-1	Babcock & Wilcox Combination Boiler Natural Gas – start up, primary fuel	5.2 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	SOP 12/10/13
2 (PH-1ABC)	PHS-1	Babcock & Wilcox Combination Boiler Propane – start up, primary fuel	12.5 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	SOP 12/10/13

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment: PACKAGE BOILER - Unit Ref. #3 – NSPS (40 CFR 60 Subpart Db), MACT (40 CFR 63, Subpart DDDDD)</b>							
3 (PH2-2A)	PHS-2	Package Boiler Natural Gas/Propane Combustion -	243.83 mmBtu/hr	Clean burning fuels	None	PM/PM-10	SOP 12/10/13
3 (PH2-2B)	PHS-2	Package Boiler Number 2 Fuel Oil – secondary fuel	247 mmBtu/hr	Low sulfur fuels, not to exceed 0.2% <u>and</u> low nitrogen fuels, not to exceed 0.3% by weight.	None	SO <sub>2</sub> & NO <sub>x</sub>	SOP 12/10/13
Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Wood Yard – Unit Ref. #4</b>							
4 (WY-1A)	Fugitive	Wood Yard	1,600 BDT/day BDT = Bone Dry Tons	None	None	None	SOP 12/10/13
4 (WY-1B) (WY-1Ba., WY-1B.b, WY- 1B.c)	Fugitive	Wood Yard Debarker (1B.a), Chipper (WY- 1B.b), Conveyor (WY-1B.c)	1,600 BDT/day BDT = Bone Dry Tons	None	None	None	SOP 12/10/13
<b>Thermomechanical Pulping Process (TMP) – Unit Ref. #1</b>							
1 (TMP-1)	Fugitive	TMP Entire Wood Fiber Line	942 ADT/Day ADT = Air Dry Tons	-	-	PM/PM-10	SOP 12/10/13
1 (TMP-1A)	TMPS-1A	TMP Latency Transfer Chest and Rejects Chest	942 ADT/Day ADT = Air Dry Tons	TMP Heat Recovery System No. 1	TMPC-1A	VOC Rated at 40.5 %	RACT July 12, 1996 Consent Agreement



Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
1 (TMP-1B)	TMPS-1B	TMP Steam Tubes and Atmospheric Refiners	942 ADT/Day ADT = Air Dry Tons	TMP Heat Recovery System No. 2	TMPC-1B	VOC Rated at 40.5 %	RACT July 12, 1996 Consent Agreement
1 (TMP-1C)	TMPS-1C	TMP Thickener	942 ADT/Day ADT = Air Dry Tons	None	None	None	RACT July 12, 1996 Consent Agreement
1 (TMP-51D)	TMPS-1C	TMP Reject Refiners	942 ADT/Day ADT = Air Dry Tons	None	None	None	RACT July 12, 1996 Consent Agreement
<b>Wastewater Treatment Plant – Unit Ref. #5</b>							
5 (WWTP-1)	Fugitive	Wastewater Treatment Plant – hydraulic cap.	4.2 MGD and 4.8 MGD daily max. MGD = mm gal/day	None	None	None	Letter: Re-rating WWTP June 10, 2002
<b>Paper Mill – Unit Ref. #6</b>							
6 (PM-1A)	VENTS PM 1-12	Paper De-watering, Forming and Drying	39 BDT/hr BDT = Bone Dry Tons	None	None	VOC	
6 (PM-1B)	VENTS PM 1-12	Paper Machine Cleaning	39 BDT/hr BDT = Bone Dry Tons	None	None	VOC	

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Recycle Plant – Unit Ref. #7</b>							
7 (RPM01)	Fugitive	Recycle Facility: Drum Pulper, Screens, Flotation Cells, Disc Thickener, Double Wire Press, Post-Flotation, Drum Washer	254 BDT/day - output	None	None	PM/PM-10 & VOC	
<b>Parts Washers (Non-Halogenated Cold Solvent Degreasers) – Unit Ref. #8</b>							
8 (MI-I1)	Fugitive	7 Assorted Parts Washers totaling 266 gallons – Non Halogen – Safety Kleen Services.	266 gallons - Total <u>combined</u> capacity. 2 @ 26 gallons, 3 @ 77 gallons and 2 @ 30 gallons.	None	None	VOC	
<b>Industrial Landfill– Unit Ref. #9</b>							
9 (LF-1)	Fugitive	Landfill surface	None	None	None	PM/PM-10	
<b>Emergency Diesel Engine – Unit Ref #10</b>							
10 (MI-I5)	NA	Emergency Diesel Fire Pump	270 hp	None	None	NOx	

**III. Fuel Burning Equipment Requirements: B&W COMBINATION BOILER - Unit Ref. #2**  
**Subject to MACT (40 CFR 63, Subpart DDDDD)**

**A. Limitations**

1. Particulate Matter (PM) and PM-10 emissions from the B&W combination boiler, Unit Ref. No. 2, shall be controlled by a multi-cyclone followed by an electrostatic precipitator. The electrostatic precipitator shall be equipped with monitoring devices that continuously measure the primary voltage, primary current and secondary current. The electrostatic precipitator shall be provided with adequate access for inspection.  
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 4 of the 12/10/2013 Permit)
2. Carbon monoxide emissions from the B&W combination boiler, Unit Ref. No. 2, shall be controlled by the coal and wood waste burner arrangement.  
(9 VAC 5-80-110 and Condition 5 of the 12/10/2013 Permit)
3. Sulfur dioxide emissions from the B&W combination boiler, Unit Ref. No. 2 and package boiler, Unit Ref. No. 3, shall be controlled by required use of low sulfur fuel and shall not exceed 0.2 percent by weight per shipment.  
(9 VAC 5-80-110 and Condition 7 of the 12/10/2013 Permit)
4. Volatile Organic Compound emissions (VOC) from the B&W combination boiler, Unit Ref. No. 2 shall be controlled by the use of good combustion practices.  
(9 VAC 5-80-110 and Condition E-3 of the July 12, 1996 RACT Consent Agreement)
5. The B&W combination boiler, Unit Ref. No. 2, shall not fire wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day unless the boiler is also firing coal in combination with wood, wood waste and paper sludge/paper waste.  
(9 VAC 5-80-110 and Condition 11 of the 12/10/2013 Permit)
6. The oxygen content of the flue gas, of the B&W combination boiler, Unit Ref. No. 2, shall not be less than 2 percent by weight when the boiler is firing wood waste and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The combination boiler shall be equipped with an oxygen sensor. The oxygen sensor shall be maintained such that it is in proper working order at all times. The oxygen content of the boiler shall be recorded a minimum of once every eight hour shift when the combination boiler is firing wood waste and paper sludge/paper waste in excess of 450 tons per day. The oxygen readings shall be used to calculate a thirty (30) day rolling average.  
(9 VAC 5-80-110 and Condition 12 of the 12/10/2013 Permit)
7. The approved fuels for the B&W combination boiler, Unit Ref. No. 2, are bituminous coal, distillate oil, natural gas, propane, wood waste, and paper waste/sludge resulting from paper recycling, the TMP process and wastewater treatment at the facility. A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 20 of the 12/10/2013 Permit)
8. The sulfur and ash content of the coal to be burned in the B&W combination boiler, Unit Ref. No. 2, shall not exceed 1.2 percent and 12 percent by weight, respectively, per shipment. The permittee shall maintain records (supplier fuel analysis) of all coal shipments purchased. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and Condition 21 of the 12/10/2013 Permit)

9. Emissions from the operation of the B&W combination boiler, Unit Ref. No. 2, shall not exceed the limits specified below:

<b>Total Suspended Particulate</b>	<b>0.10 lbs/10<sup>6</sup> Btu</b>	<b>24.3 lbs/hr</b>	<b>106.4 tons/yr</b>
<b>PM-10</b>	<b>0.10 lbs/10<sup>6</sup> Btu</b>	<b>24.3 lbs/hr</b>	<b>106.4 tons/yr</b>
<b>Sulfur Dioxide</b>		<b>518.4 lbs/hr</b>	<b>2270.6 tons/yr</b>
<b>Nitrogen Oxides (as NO<sub>2</sub>)</b>	<b>0.70 lbs/10<sup>6</sup> Btu</b>	<b>170.1 lbs/hr</b>	<b>745.0 tons/yr</b>
<b>Carbon Monoxide</b>		<b>257.2 lbs/hr</b>	<b>1126.3 tons/yr</b>
<b>Volatile Organic Compounds</b>		<b>7.0 lbs/hr</b>	<b>30.7 tons/yr</b>

(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 27 of the 12/10/2013 Permit)

10. Visible emissions from the B&W combination boiler, Unit Ref. No. 2, shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 29 of the 12/10/2013 Permit)
11. Minimum standards for visible and fugitive emissions from the crushing, conveying, storage, and handling of coal used in the B&W combination boiler, Unit Ref. No. 2, shall apply as stated in Article 4-15 – Standards for Coal Preparation.  
(9 VAC 5-80-110, 9 VAC 5-40-1990 and 9 VAC 5-40-2000)

#### **B. Monitoring**

1. A continuous monitoring system for measuring and recording the nitrogen oxides emissions from the B&W combination boiler, Unit Ref. No. 2, stack shall be installed, calibrated, maintained and operated by the owner or operator unless it is demonstrated during performance tests that the emissions of nitrogen oxides is 30 percent or more below the allowable of 0.70 pounds/10<sup>6</sup> BTU heat input (less than 0.49 pounds/10<sup>6</sup> BTU heat input).  
(9 VAC 5-80-110 and Condition 14 of the 12/10/2013 Permit)
2. A continuous monitoring system for measuring and recording the opacity of the B&W combination boiler, Unit Ref. No. 2, stack emissions shall be installed, calibrated, maintained and operated by the owner or operator.  
(9 VAC 5-80-110 and Condition 15 of the 12/10/2013 Permit)

#### **C. Recordkeeping**

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of (each permitted fuel) coal, distillate oil, propane, natural gas, wood waste and paper waste/sludge fired in the B&W combination boiler, Unit Ref. #2, calculated monthly as the sum of each consecutive 12-month period.

- b. Certification for each coal shipment purchased, indicating sulfur (not to exceed 1.2 percent) content and ash (not to exceed 12 percent) content by weight, respectively, per shipment.
- c. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- d. CEM records for the B&W combination boiler.
- e. Once per shift the electrostatic precipitator meter/gauge readings to include the primary and secondary voltage and amperage readings.
- f. Records indicating coal usage when wood, wood waste and paper sludge/paper waste is being fired in excess of four hundred and fifty (450) tons per day.
- g. The B&W combination boiler flue gas oxygen content shall be recorded when the boiler is firing wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The oxygen readings shall be averaged on a thirty (30) day rolling basis.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-20-110 and Condition 32 of the 12/10/2013 Permit)

#### **IV. Fuel Burning Equipment Requirements: PACKAGE BOILER – Unit Ref. #3** ***Subject to NSPS (40 CFR 60 Subpart Db), MACT (40 CFR 63, Subpart DDDDD)***

##### **A. Limitations**

- 1. Nitrogen oxide emissions from the package boiler, Unit Ref. No. 3, shall be controlled by boiler design, and good operation procedures. The package boiler shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 6 of the 12/10/2013 Permit)
- 2. Particulate matter emissions from the package boiler, Unit Ref. No. 3, shall be controlled by the use of clean burning fuels.  
(9 VAC 5-80-110 and Condition 8 of the 12/10/2013 Permit)
- 3. Carbon monoxide and VOC emissions from the package boiler set, Unit Ref. No. 3, shall be controlled by the use of good combustion operating practices.  
(9 VAC 5-80-110, Condition E-3 of the July 12, 1996 RACT Consent Agreement, and Condition 9 of the 12/10/2013 Permit)
- 4. The maximum nitrogen content of the oil to be burned in the package boiler, Unit Ref. No. 3, shall not exceed 0.3 percent by weight per shipment. The maximum sulfur content of the oil to be burned in the package boiler shall not exceed 0.2 percent (facility-wide limitation). The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier
  - b. The date on which the oil was received
  - c. The volume of distillate oil delivered in the shipment

d. The nitrogen and sulfur content of the oil

(9 VAC 5-80-110 and Condition 13 of the 12/10/2013 Permit and Condition 22 of the 12/10/2013 Permit)

5. The package boiler, Unit Ref. No. 3, shall consume no more than the following:

<b>Natural Gas</b>	<b><math>234 \times 10^3 \text{ ft}^3</math> per hour</b>	<b><math>673.9 \times 10^6 \text{ ft}^3</math> per year</b>
<b>Propane</b>	<b><math>2.66 \times 10^3</math> gal per hour</b>	<b><math>7.66 \times 10^6</math> gal per year</b>
<b>No. 2 Fuel Oil</b>	<b>1890 gal per hour</b>	<b><math>5.40 \times 10^6</math> gal per year</b>

When using a combination of natural gas, propane and No. 2 fuel oil during any calendar year, the annual heat input shall not exceed  $2.12 \times 10^{12}$  BTU based on a higher heating value of 1042 BTU/ft<sup>3</sup> for natural gas, 91,690 BTU/GAL for propane, and  $1.31 \times 10^5$  BTU/gal for No. 2 fuel oil.  
 (9 VAC 5-80-110, 40 CFR 60, Subpart Db and Condition 24 of the 12/10/2013 Permit)

6. The package boiler, Unit Ref. No. 3, shall not operate more than 2880 hours per calendar year.  
 (9 VAC 5-80-110, and Condition 25 of the 12/10/2013 Permit)

7. The package boiler, Unit Ref. No. 3, shall not operate more than 10 percent of the maximum "annual capacity factor" unless the requirements as stated in specific Condition IV.B.1 of this permit have been met. The annual capacity factor is defined in 40 CFR 60 subpart Db paragraph 60.41b.  
 (9 VAC 5-80-110 and Conditions 16 and 26 of the 12/10/2013 Permit)

8. Criteria pollutant emissions from the operation of the package boiler, Unit Ref. No. 3, shall not exceed the limitations specified below:

• **NATURAL GAS**

	<b>Pounds per <math>10^6</math> BTU</b>	<b>Pounds per hour</b>
<b>TSP</b>	<b><math>5.1 \times 10^{-3}</math></b>	<b>1.24</b>
<b>PM-10</b>	<b><math>5.1 \times 10^{-3}</math></b>	<b>1.24</b>
<b>Sulfur Dioxide</b> (3-hour rolling average)	<b><math>2.8 \times 10^{-3}</math></b>	<b>0.68</b>
<b>Nitrogen Oxides</b> (30-day rolling average)	<b><math>1.0 \times 10^{-1}</math></b>	<b>24.4</b>
<b>Carbon Monoxide</b>		<b>4.9</b>
<b>Volatile Organic Compounds</b>		<b>2.44</b>

• **PROPANE/AIR MIXTURE**

	<b>Pounds per <math>10^6</math> BTU</b>	<b>Pounds per hour</b>
<b>TSP</b>	<b><math>5.1 \times 10^{-3}</math></b>	<b>1.24</b>
<b>PM-10</b>	<b><math>5.1 \times 10^{-3}</math></b>	<b>1.24</b>
<b>Sulfur Dioxide</b> (3-hour rolling average)	<b><math>2.8 \times 10^{-3}</math></b>	
<b>Nitrogen Oxides</b> (30-day rolling average)	<b><math>1.0 \times 10^{-1}</math></b>	<b>24.4</b>
<b>Carbon Monoxide</b>		<b>4.9</b>
<b>Volatile Organic Compounds</b>		<b>2.44</b>

• **NO. 2 FUEL OIL**

	Pounds per 10 <sup>6</sup> BTU	Pounds per hour
TSP	1.0 x 10 <sup>-1</sup>	24.7
PM-10	1.0 x 10 <sup>-1</sup>	24.7
Sulfur Dioxide (3-hour rolling average)	2.2 x 10 <sup>-1</sup>	54.34
NO <sub>x</sub> <sup>+</sup> (30-day rolling average)	1.0 x 10 <sup>-1</sup>	24.7
Carbon Monoxide		4.9
Volatile Organic Compounds		2.5
Lead		0.002

Must be met at all times except start-ups, shutdowns including malfunctions.

<b><u>PACKAGE BOILER MAXIMUM ANNUAL EMISSIONS</u></b>	<b><u>TONS PER YEAR</u></b>
TSP	35.6 tons/yr
PM-10	35.6 tons/yr
Sulfur Dioxide	78.2 tons/yr
Nitrogen Oxides	35.6 tons/yr
Carbon Monoxide	7.1 tons/yr
Volatile Organic Compounds	3.6 tons/yr
Lead	0.003 lbs/yr

(9 VAC 5-50-260, 9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60, Subpart Db and Condition 28 of the 12/10/2013 Permit)

- Visible emissions from package boiler, Unit Ref. No. 3, exhaust shall not exceed 10 percent opacity, except during one six-minute period per hour which shall not exceed 20 percent opacity.  
(9 VAC 5-80-110 and Condition 30 of the 12/10/2013 Permit)

**B. Monitoring**

- A continuous emissions monitoring system shall be installed and operational within ninety (90) calendar days of exceeding 10 percent of the annual capacity factor. The continuous emission monitoring system (CEMS) consisting of a NO<sub>x</sub> monitor and a suitable diluent monitor (either CO<sub>2</sub> or O<sub>2</sub>), shall be installed on the package boiler, Unit Ref. No. 3. Each NO<sub>x</sub> CEMS shall be performance tested in accordance with EPA Performance Specification No. 2 (40 CFR 60, Appendix B). Data from the NO<sub>x</sub> CEMS shall be used to determine compliance with the emission standard (in lbs/MMBtu) on a thirty (30) day rolling average as stated in specific Condition 28 of the 06/30/2004 permit. All of the CEM calculation, data reduction, recordkeeping, and reporting requirements of NSPS Subpart Db shall apply. A thirty (30) day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department (Director, Piedmont Regional Office).  
(9 VAC 5-80-110, 40 CFR 60, Subpart Db and Conditions 16 and 28 of the 12/10/2013 Permit)
- A continuous opacity monitoring system shall be installed on the package boiler, Unit Ref. No. 3, stack to measure opacity when the boiler is burning No. 2 fuel oil. The continuous opacity monitor shall be installed and operational within ninety (90) calendar days of the actual firing of No. 2 oil in the package boiler. The opacity monitor shall be performance-tested in accordance with EPA Performance Specification No. 1 (40 CFR 60, Appendix B). A thirty (30) day notification prior to the demonstration of

continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department Director, Piedmont Regional Office.  
(9 VAC 5-80-110, 40 CFR 60, Subpart Db and Condition 17 of the 12/10/2013 Permit)

3. The continuous monitoring data generated by the opacity monitor may, at the discretion of the Board, be used as evidence of violation of the emission standards. These data shall be kept on file and made available to the Department upon request.  
(9 VAC 5-80-110 and Condition 18 of the 12/10/2013 Permit)
4. The NO<sub>x</sub> and opacity monitoring systems shall meet a minimum data availability of 90 percent of package boiler, Unit Ref. No. 3, operating hours on a 12-month rolling average. The NO<sub>x</sub> monitoring systems shall also meet the quality assurance requirements of 40 CFR part 60, Appendix F.  
(9 VAC 5-80-110 and Condition 19 of the 12/10/2013 Permit)

### **C. Recordkeeping**

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
  - a. Annual throughput of (each permitted fuel) distillate oil, propane, and natural gas fired in the package boiler, Unit Ref. #3, calculated monthly as the sum of each consecutive 12-month period.
  - b. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
  - c. Dates and hours of operation for the package boiler not to exceed two thousand eight hundred and eighty hours (2,880) calculate as the sum of each consecutive 12-month period.
  - d. CEM records for the package boiler (upon compliance with Condition 17 of 12/10/2013 Permit).
  - e. Annual capacity factor calculations for the package boiler; annual capacity factor is defined in 40 CFR subpart Db paragraph 60.41b.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-50-50, 5-20-110 and Conditions 17 and 32 of the 12/10/2013 Permit)

### **D. Testing**

1. When permit condition numbers 16 and 17 (of the 12/10/13 Permit) become applicable and the permittee has installed a NO<sub>x</sub> monitor or an opacity monitor, the permittee shall submit reports to the Director, Piedmont Regional Office within thirty (30) days after the end of each calendar quarter as described in 40 CFR 60.49b (h) and (i). Details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office. With regard to the opacity monitor, the quarterly report shall include excess emission and monitoring system downtime reports and/or summaries in accordance with 40 CFR § 60.7 (c) and (d). Excess opacity emissions are defined as periods for which the average opacity exceeds the limit stated in specific Condition 30 of this permit.  
(9 VAC 5-80-110, Condition 35 of the 12/10/2013 Permit)

### **E. Reporting**

1. The permittee shall submit fuel quality reports to the Director, Piedmont Region, within thirty (30) days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a



statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter the reports shall include:

- a. The dates included in the calendar quarter,
- b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition IV.A.4 for each shipment of distillate oil, and
- c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-110)

2. In the case that the package boiler, Unit Ref. #3 fires No. 2 fuel oil or exceeds 10 percent of the annual capacity factor the, a NOx or opacity monitor shall be installed and therefore the permittee shall be required to submit reports to the Director, Piedmont Regional Office within thirty (30) days after the end of each calendar quarter as described in 40 CFR 60.49b (h) and (i). Details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office. With regard to the opacity monitor, the quarterly report shall include excess emission and monitoring system downtime reports and/or summaries in accordance with 40 CFR § 60.7 (c) and (d). Excess opacity emissions are defined as periods for which the average opacity exceeds the limit stated in specific Condition 30 of permit 06/30/2004.

(9 VAC 5-80-110 and Condition 16 of the 12/10/2013 Permit)

3. A continuous opacity monitoring system shall be installed on the package boiler, Unit Ref. No. 3, stack to measure opacity when the boiler is burning No. 2 fuel oil. The continuous opacity monitor shall be installed and operational within ninety (90) calendar days of the actual firing of No. 2 oil in the package boiler. The opacity monitor shall be performance-tested in accordance with EPA Performance Specification No. 1 (40 CFR 60, Appendix B). A thirty (30) day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department Director, Piedmont Regional Office.

(9 VAC 5-80-110 and Condition 17 of the 12/10/2013 Permit)

## **V. Requirements: WOOD YARD – Unit Ref. #4**

### **A. Limitations**

1. Particulate emissions from the slashing process shall be controlled by good air pollution control practices. The slashing process shall be provided with adequate access for inspection.

(9 VAC 5-40-80, 9 VAC 5-40-330, 9 VAC-5-50-300 and 9 VAC 5-80-110)

2. Particulate emissions from coal handling, slashing, debarking and chipping process operations shall not exceed the standards set in Article 4, table 4-4A.

(9 VAC 5-80-110)

3. Fugitive dust shall be controlled as follows and in accordance with Chapter 40 Articles 1 and 4, and Chapter 50 Article 1:

- a. Emissions from the chipper shall be controlled by: an enclosed building and use of covered belt conveyors for the transport of chips;

- b. Coal shall be stored in a storage pile and conveyed to the boiler using a covered conveyor;

- c. All material being stockpiled shall be kept moist, as needed, to control dust during storage and handling to minimize emissions.
- d. Haul roads shall be controlled by wet suppression, asphalt, or other suitable chemicals, as needed. The main entrance road shall be paved. Reasonable precautions shall be taken to prevent disposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110, and Condition 10 of the 12/10/2013 Permit)

- 4. Good air pollution control practices and enclosure shall control particulate emissions from the debarking/chipping process. The debarking/chipping process and enclosure shall be provided with adequate access for inspection.  
(9 VAC 5-50-20 and 9 VAC 5-80-110)
- 5. Visible emission from the debarking/chipping process shall not exceed 20 percent opacity except during on one (1) six-minute period in any one-hour in which visible emissions shall not exceed 30 percent opacity.  
(9 VAC 5-50-80 and 9 VAC 5-80-110)

**B. Monitoring**

- 1. The debarking/chipping process enclosure vents shall be observed visually for emissions at a minimum of once (1) each calendar month in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 appendix A Method 22 techniques (condensed water vapor/steam is not a visual emission) for at least a brief time to identify the presence of visual emissions. If the debarking/chipping process enclosure vent is observed having visible emissions, it shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visual emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visual emissions. If the six (6) minute VEE exceeds the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three (3) - six (6) minute periods (at least 18 minutes). Visual emissions shall not exceed 20 percent opacity but not greater than 30 percent opacity for more than one six minute period in any one hour. All visible emission observations, VEE results, and corrective actions shall be recorded.

40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE.

(9 VAC 5-80-110 and 9 VAC 5-50-50)

**C. Recordkeeping**

- 1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
  - a. Records of visual emissions observations, VEE results and corrective actions.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

## **VI. Requirements: Thermomechanical Pulp Mill – Unit Ref. #1**

### **A. Limitations**

1. VOC emissions from the steam tubes, primary refiners, and secondary refiners for the four (4) TMP lines shall be controlled by a double pass, plate, and frame water heat exchanger/condenser equipped with a quench water spray. The two (2) stage heat exchanger/condenser shall use water as the heat transfer medium.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-4 of the July 12, 1996 RACT Consent Agreement)
2. VOC emissions from the latency transfer chest and the rejects latency chest for the four (4) TMP lines shall be controlled by a double pass, plate, and frame heat exchanger/condenser. The first stage of the heat exchanger/condenser shall use water as a heat transfer medium. The second stage of the condenser shall use glycol as the heat transfer medium.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-5 of the July 12, 1996 RACT Consent Agreement)
3. Bear Island shall maintain a minimum overall VOC emission removal efficiency of forty point five (40.5) percent on a mass basis from the TMP emissions sources which follow: steam tubes, primary refiners, secondary refiners, latency transfer chest, and rejects latency chest from all four (4) TMP lines.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-6 of the July 12, 1996 RACT Consent Agreement)
4. The glycol heat transfer system shall operate at a minimum flow rate of three hundred (300) gallons per minute.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-9 of the July 12, 1996 RACT Consent Agreement)
5. The two (2) water heat transfer systems shall operate at a minimum flow rate of two hundred (200) gallons per minute.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-10 of the July 12, 1996 RACT Consent Agreement)
6. The heat exchangers/condensers shall operate at all times when the TMP mill is in operation.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-12 of the July 12, 1996 RACT Consent Agreement)
7. The condensation from the two (2) heat exchangers/condensers shall be discharged to the Waste Water Treatment Plant.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-18 of the July 12, 1996 RACT Consent Agreement)
8. In order to minimize the duration and frequency of excess emissions due to the malfunctions of process or air pollution control equipment, Bear Island shall:
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance, including dates and duration of any outages. These records shall be maintained on site for a period of five (5) years and shall be made available to the DEQ upon request.
  - b. Maintain an inventory of spare parts that are needed to minimize duration of air pollution control equipment breakdowns.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-23 of the July 12, 1996 RACT Consent Agreement)

### **B. Monitoring**

1. The three (3) heat transfer systems contained in the two (2) heat exchangers/condensers shall be equipped with inlet temperature and outlet temperature gauges. The inlet and outlet heat transfer

system temperatures shall be measured continuously. The inlet and outlet temperatures shall be recorded once per eight (8) hour shift. The inlet and outlet temperatures shall be used to calculate a temperature differential for each heat transfer system. The temperature differentials shall be averaged on a daily basis. All continuous monitoring devices shall be maintained and calibrated in accordance with the manufacturer's specifications. At a minimum the continuous monitoring devices shall be calibrated annually and the results of the calibrations recorded.

Three (3) standard deviations will be used to determine the minimum temperature differentials for the two (2) exchangers/condensers, which are as follows:

**HRS #1 – Water Side: 45°F**  
**HRS #1 – Glycol Side: 4°F**  
**HRS #2 – Water Side: 53°F**

(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-7 of the July 12, 1996 RACT Consent Agreement)

2. The two (2) water heat transfer systems shall be equipped with liquid flow meters. The meters shall measure the amount of liquid flowing through the water heat transfer system continuously. The information from the meters shall be recorded once per eight (8) hour shift to calculate an average daily liquid flow rate.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-8 of the July 12, 1996 RACT Consent Agreement)
3. The three (3) heat transfer systems shall be equipped with alarms indicating the absence of liquid flowing to the two (2) heat exchangers/condensers. The alarms shall be maintained in accordance with the manufacturer's specifications.  
(9 VAC 5-80-110, 9 VAC 5-40-7390 and Condition E-11 of the July 12, 1996 RACT Consent Agreement)

### **C. Recordkeeping**

1. Bear Island shall maintain records of all operating parameters necessary to demonstrate compliance. These records shall be maintained for the two (2) heat exchangers/condensers and associated continuous temperature and flow monitoring equipment and shall include the following:
  - a. a maintenance schedule for the heat exchangers/condensers and associated monitoring equipment;
  - b. scheduled and unscheduled maintenance records;
  - c. an inventory of spare parts that are needed to minimize durations of equipment breakdowns;
  - d. written operating procedures;
  - e. heat transfer medium inlet and outlet temperatures and temperature differentials (recorded once per eight (8) hour shift);
  - f. liquid flow for the two (2) water heat transfer systems (recorded once per eight (8) hour shift);
  - g. operating hours and capacity for the four (4) TMP lines recorded daily used to calculate a ninety (90) day rolling average;
  - h. results of annual calibrations of the water temperature and flow monitors.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-7390 and Condition E-22 of the July 12, 1996 RACT Consent Agreement)

**D. Compliance Assurance Monitoring (CAM)**

1. Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the double pass (two stage) plate and frame heat exchanger/condenser system controlling the Thermomechanical Pulp Mill (TMP), Unit Ref. # 1, process according to the following:.

Heat Exchanger/Condenser System Compliance Assurance (CAM) Plan  
 TMP Unit Ref. # 1

	<b><u>Indicator 1</u></b>	<b><u>Indicator 2</u></b>
<b>Indicator</b>	Liquid Flow Rate of the heat transfer medium	Inlet and Outlet Temperatures of the heat transfer system
<b><u>Measurement Approach</u></b>	Measuring the flow rate of the heat transfer medium with a liquid flow meter.	Measuring the inlet and outlet temperatures of the heat transfer systems with temperature gauges.

	<u>Indicator 1</u>	<u>Indicator 2</u>
<b>Indicator Range</b>	<p><u>For Systems using water as the heat transfer medium:</u> Minimum flow rate of 200 gallons per minute per Condition E-10 of the July 12, 1996 RACT Agreement.</p> <p><u>For Systems using glycol as the heat transfer medium:</u> Minimum flow rate of 300 gallons per minute per Condition E-9 of the July 12, 1996 RACT Agreement.</p> <p>An excursion is defined as any operating condition where the measured/recorded once per eight hour shift flow rate exceeds the permitted minimum flow rate.</p> <p>When an excursion occurs, corrective actions will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. Excursions will be documented.</p>	<p>Per Condition E-10 of the July 12, 1996 RACT Agreement. Three (3) standard deviations will be used to determine the following minimum temperature differentials:</p> <p>For System using only water as the heat transfer medium: 53° F</p> <p>For System using water and glycol as the heat transfer medium:          Water Side: 45° F          Glycol Side: 4° F</p> <p>An excursion is defined as any operating condition where the measured/recorded once per eight hour shift inlet/outlet temperature exceeds the permitted minimum temperature differentials.</p> <p>When an excursion occurs, corrective actions will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. Excursions will be documented.</p>
<b>QIP Threshold</b>	The selected QIP threshold is excursions occurring in 5% of the total days of operation in a 6-month period.	The selected QIP threshold is excursions occurring in 5% of the total days of operation in a 6-month period.
<b><u>Performance Criteria:</u></b>	<p>The water and glycol flows rates are critical for the performance of the heat exchanger/condenser system.</p> <p>Flow meter readings are recorded at least once per eight (8) hour shift to calculate an average daily liquid flow rate in gallons per minute for each system.</p>	<p>The temperature differential of the inlet and outlet temperature of the exchanger/condenser system is indication of the how the system is performing.</p> <p>The inlet and outlet temperatures readings are recorded once per eight (8) hour shift and used to calculate an average daily temperature differential for each heat transfer system.</p>
<b><u>Data Representativeness</u></b>	The flow meters are located to measure the flow of the liquid heat medium of the systems.	The temperature probes are located at specific locations to measure the inlet and outlet temperatures of the system.

	<u>Indicator 1</u>	<u>Indicator 2</u>
<u>Verification of Operational Status</u>	Systems are equipped with "no flow" alarms. Flow is continuously monitored and flow meter readings are recorded once per 8-hour shift.	Temperature is continuously monitored and temperature readings are recorded once per 8-hour shift.
<u>QA/QC Practices and Criteria</u>	Flow meters will be calibrated at least annually, in accordance with the manufacturer's specifications.	Temperature gauges will be calibrated at least annually, in accordance with the manufacturer's specifications.
<u>Monitoring Frequency</u>	Continuously measure the amount of liquid flowing through the system.	Continuously measure the inlet and outlet temperatures of the heat transfer systems
<u>Data Collection Procedure</u>	Meter readings are recorded at least once per eight (8) hour shift.	The inlet and outlet temperatures are recorded once per eight (8) hour shift.

2. Compliance Assurance Monitoring (CAM) - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.  
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))
3. Compliance Assurance Monitoring (CAM) - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
(9 VAC 5-80-110 E and 40 CFR 64.6 (b))
4. Compliance Assurance Monitoring (CAM) - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the TMP, Unit Ref. # 1 is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.  
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))
5. Compliance Assurance Monitoring (CAM) - Upon detecting an excursion or exceedance, the permittee shall restore operation of the TMP, Unit Ref. # 1 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))

6. Compliance Assurance Monitoring (CAM) - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(2))
7. Compliance Assurance Monitoring (CAM) - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (e))
8. Compliance Assurance Monitoring (CAM) - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the TMP, Unit Ref. # 1 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
  - a. Improved preventative maintenance practices;
  - b. Process operation changes;
  - c. Appropriate improvements to control methods;
  - d. Other steps appropriate to correct control performance; and
  - e. More frequent or improved monitoring.  
(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))
9. Compliance Assurance Monitoring (CAM) Recordkeeping – The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to section 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).  
(9 VAC 5-80-110 E and 40 CFR 64.9(b))

## **VII. Requirements: Waste Water Treatment Plant – Unit Ref. #5**

### **A. Limitations**

1. Emissions from the operation of the Waste Water Treatment Plant (WWTP) shall be controlled by good operating practices.  
(9 VAC 5-80-110 and Condition E-19 of the July 12, 1996 RACT Consent Agreement)

### **B. Monitoring**

1. All WWTP established parameters used to calculate emissions by the use of appropriate models shall be monitored.  
(9 VAC 5-40-7500 and 9 VAC 5-50-110)



**C. Recordkeeping**

1. The permittee shall maintain records of all WWTP operating parameters use to calculate emissions to demonstrate compliance with Condition VII.A of this permit. The permittee shall maintain records of annual emissions calculations and supporting data. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-40-7510 and 9 VAC 5-50-110)

**VIII. Requirements: Paper Mill (Paper Machine) – Unit Ref. #6**

**A. Limitations**

1. Emissions from the operation of the paper machine shall be controlled by good operating practices.  
(9 VAC 5-80-110 and 9 VAC 5-50-20)
2. Emissions from the cleaning of the paper machine shall be controlled by the use of good cleaning practices.  
(9 VAC 5-80-110 and 9 VAC 5-50-240)

**B. Monitoring**

1. Operating and cleaning practices and established parameters used to calculate emissions from the operation of and cleaning of the paper machine shall be monitored.  
(9 VAC 5-80-110 and 9 VAC 5-50-240)

**C. Recordkeeping**

1. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include but are not limited to the following:
  - a. Annual Volatile Organic Compound (VOC) emissions from the cleaning of the press, calculated monthly as the sum of each consecutive 12-month period.
  - b. Monthly and annual throughput of pulp to the paper machine. Annual emissions calculated from the pulp throughput shall be calculated monthly as the sum of each consecutive 12-month period.
  - c. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all cleaning solutions used on the paper machine.
  - d. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all solutions added in the paper making process.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and 9 VAC 5-50-240)

**IX. Requirements: Recycle Plant – Unit Ref. #7**

**A. Limitations**

1. Emissions from the operation of the Recycle Plant shall be controlled by good operating practices.  
(9 VAC 5-80-110 and 9 VAC 5-50-240)

**X. Requirements: Parts Washer (Non-Halogenated Cold Solvent Degreasers) – Unit Ref. #8**

**A. Limitations**

1. No owner or other person shall use or permit the use of any cold cleaner unless such cleaner is equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions.  
(9 VAC 5-80-110 and 9 VAC 5-40-3280 C)
2. Achievement of the emission standard in Condition 1 by use of the methods in 9 VAC 5-40-3290 C and D will be acceptable to the board.  
(9 VAC 5-80-110 and 9 VAC 5-40-3280 C)
3. Emissions from each solvent metal cleaning operation (cold cleaning) shall be controlled as follows:
  - a. Covers or enclosed remote reservoirs should be provided. Covers shall be designed so that they can be easily operated with one hand. (Covers for large degreasers may require mechanical assistance, by spring loading, counter weighting or powered systems). Enclosed remote reservoirs should be designed such that they provide reduction effectiveness equivalent to that of a cover.
  - b. External or internal drainage facilities shall be provided to collect and return the solvent to a closed container or solvent cleaning machine. If solvent volatility is greater than 0.6 psi measured at 100°F, then the drainage facilities should be internal, so that parts are enclosed under the cover while draining. The drainage facilities may be external for applications where an internal type cannot fit into the cleaning system.
  - c. A permanent label summarizing the operating procedures in Condition 5. Should be placed in a conspicuous location on or near the degreaser.
  - d. If used, the solvent spray should be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.  
(9 VAC 5-80-110 and 9 VAC 5-40-3290 C1)
4. The permittee shall operate each solvent cleaning operation (cold cleaning) consistent with good operating practices including the following:
  - a. Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate to the atmosphere. Store waste solvent only in closed containers.
  - b. The cold cleaning unit should be closed whenever not handling parts in the cold cleaner
  - c. Cleaned parts should drain for at least 15 seconds or until dripping ceases.  
(9 VAC 5-80-110, 9 VAC 5-40 3280 c.1 & 2, and 9 VAC 5-40-3290 C.2)
5. The permittee shall dispose of waste solvent from the cold cleaning units by one of the following methods:
  - a. Reclamation (either by outside services or in-house)
  - b. Incineration  
(9 VAC 5-80-490, 9 VAC 5-40-3280 C.1 & 2, and 9 VAC 5-40-3290.D)

6. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. The records shall include, but are not limited to:
  - a. Records documenting that each solvent metal cleaning operation (cold cleaning) at the facility are in compliance with the requirements of Conditions 1 – 6.  
(9 VAC 5-80-110)

## **XI. Requirements: Industrial Landfill – Unit Ref. #9**

### **A. Limitations**

1. Emissions from the operation of the industrial landfill shall be controlled by good operating practices.  
(9 VAC 5-80-110 and 9 VAC 5-50-20)

## **XII. Requirements: Fuel Burning Equipment: Emergency Diesel Fire Pump – Unit Ref. #10**

### **A. Limitations**

1. Except where this permit is more restrictive than the applicable requirement, the Emergency Diesel Fire Pump (MI-I5) shall be operated in compliance with the applicable provision of the MACT, 40 CFR 63, Subpart ZZZZ.  
(9 VAC 5-80-110 and 40 CFR 63, Subpart ZZZZ)
2. Visible emissions from the Emergency Diesel Fire Pump (MI-I5) shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 30 percent opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this section.  
(9 VAC 5-80-110 and 9 VAC 5-50-80)

## **XIII. Requirements: Facility-Wide**

### **A. Limitations**

1. The thermomechanical pulp and paper mill must be constructed and operated as proposed in the initial submittals received by the Board up to and including May 25, 1977. If any changes are made to the thermomechanical pulp and paper process that will cause an increase in emissions of air pollutants, the permit is revoked.  
(9 VAC 5-80-110 and Condition 2 of the 12/10/2013 Permit)
2. The sulfur content of the oil to be burned at the facility shall not exceed 0.2 percent by weight per shipment. The permittee shall maintain records (supplier fuel analysis) of all oil shipments purchased, indicating sulfur content per shipment. These records shall be available on site for inspection by the DEQ. Such records shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and Condition 22 of the 12/10/2013 Permit)
3. Bear Island Paper Company, LLC. shall provide certification for each coal shipment indicating the percent sulfur content by weight. The certification shall be based on samples taken at the coal supplier's loading facility of each coal shipment in accordance with ASTM Method D-2234, Type I, Condition B (August 1989) to determine the percent by weight content of sulfur. In addition Bear Island Paper Company LLC. shall obtain random samples from each shipment of coal received at the mill and

analyze the samples for sulfur. The sulfur records shall be available for inspection by the DEQ. Such records shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and Condition 23 of the 12/10/2013 Permit)

4. Except where this permit is more restrictive than the applicable requirements, the NSPS, MACT, or NESHAP equipment as described in Condition 2 shall be operated in compliance with the requirements of 40 CFR 60 subpart Db.  
(9 VAC 5-80-110 and Condition 31 of the 12/10/2013 Permit)
5. The cleaning solution used in the seven (7) parts washers located at Bear Island are non-halogen, the solution used does contain VOC therefore Article 24 - Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents shall be applicable. Any change to the current cleaning solution used in the seven (7) parts washers may need a permit to modify.  
(9 VAC 5 Chapter 40, Rule 2-24)
6. The B&W combination boiler, Unit Ref. No. 2, and the package boiler, Unit Ref. No. 3, are subject to the applicable limitations, monitoring, recordkeeping, testing and reporting requirements of 40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; and the general provisions of 40 CFR Part 63 at section 63.7565. The permittee must comply with the applicable requirements by the date established by section 63.7595(b).  
(9 VAC 5-80-110 and 40 CFR section 63.7485 and section 63.7490)
7. Except where this permit is more restrictive than the applicable requirements, the thermomechanical pulp mill (Unit Ref. #1) shall be operated in compliance with the applicable provisions of 40 CFR 63 Subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.  
(9 VAC 5-80-110 and 40 CFR 63 Subpart S)

## **B. Recordkeeping**

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:
  - a. Annual throughput of (each permitted fuel) coal, distillate oil, propane, natural gas, wood waste and paper waste/sludge fired in the combination boiler, Unit Ref. No. 2 and the package boiler, Unit Ref. No. 3, calculated monthly as the sum of each consecutive 12-month period.
  - b. Certification for each coal shipment purchased, indicating sulfur (not to exceed 1.2 percent and ash (not to exceed 12 percent) content by weight, respectively, per shipment.
  - c. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
  - d. Dates and hours of operation for the package boiler not to exceed two thousand eight hundred and eighty hours (2,880) calculate as the sum of each consecutive 12-month period.
  - e. CEM records for the package boiler (upon compliance with Specific Condition 17 of permit 06/30/2004).
  - f. CEM records for the combination boiler.
  - g. Once per shift the electrostatic precipitator meter/gage readings to include the primary and secondary voltage and amperage readings.

- h. Annual capacity factor calculations for the package boiler; annual capacity factor is defined in 40 CFR 60 subpart Db paragraph 60.41b
- i. Records indicating coal usage when wood, wood waste and paper sludge/paper waste is being fired in excess of four hundred and fifty (450) tons per day.
- j. The combination boiler flue gas oxygen content shall be recorded when the boiler is firing wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The oxygen readings shall be averaged on a thirty-day rolling basis.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.  
 (5-80-110 and Condition 32 of the 12/10/2013 Permit)

### C. Testing

- 1. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.  
 (9 VAC 5-80-110 and Condition 33 of the 12/10/2013 Permit )
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5 -80-110)

## XIV. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
PH-I2	Ash Handling	9 VAC-5-80-720 B	PM/PM-10	
WWTP-I1	Oil and Water Separator	9 VAC-5-80-720 B	VOC	
WWTP-I2	Lime Silo	9 VAC-5-80-720 B	PM/PM-10	
ST-I1	Paper Machine Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I2	TMP Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I3	WWTP Storage Tanks	9 VAC-5-80-720 C	PM/PM-10, VOC	< 1,000 gallons
ST-I4	Warehouse Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I5	Powerhouse Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I6	Recycle Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I7	Wood Yard Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I8	Maintenance Storage Tanks	9 VAC-5-80-720 B	VOC	
MI-I2	Cooling Towers-Non-VOC/Haps	9 VAC-5-80-720 B	-	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
MI-I3	Chillers - <u>Non-VOC/Haps</u>	9 VAC-5-80-720 B	-	
MI-I4	Core Cutting Machine/Bevler	9 VAC-5-80-720 B	PM-10	
MI-I5	Diesel Fire Pump	9 VAC-5-80-720 C	VOC, NOx, CO, SO <sub>2</sub> , PM-10	
PH-I1	Wood Waste Handling	9 VAC-5-80-720 B	PM10	
PH-I2	Coal Handling	9 VAC-5-80-720 B	PM10	
PH-I3	Ash Handling	9 VAC-5-80-720 B	PM10	
WY-I1	Log Handling	9 VAC-5-80-720 B	PM10	
WY-I2	Chip/Bark/Sludge Handling	9 VAC-5-80-720 B	PM10	
WY-I3	Wind Erosion	9 VAC-5-80-720 B	PM10	
WWTP-I2	Lime Silo	9 VAC-5-80-720 B	PM/PM10	
PH-I4	TGM Steam Turbine	9 VAC-5-80-720 A, B	None	
PH-I5	Ideal Electric Generator (non-combustion)	9 VAC-5-80-720 A, B	None	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## XV. Compliance Plan – N/A

There is no compliance plan for this facility.

## XVI. Permit Shield & Inapplicable Requirements

### A. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills	Not applicable because the landfill is an industrial landfill

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.  
(9 VAC 5-80-140)

## **XVII. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.  
(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent with 9 VAC 5-80-430, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### **C. Recordkeeping and Reporting**

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.

- b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.  
(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to
    - (1) Exceedance of emission limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
  - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

#### **D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- b. The identification of each term or condition of the permit that is the basis of the certification.



- c. The compliance status.
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- e. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- f. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov

(9 VAC 5-80-110 K.5)

#### **E. Permit Deviation Reporting**

The permittee shall notify the Director, Piedmont Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XII.C.3. of this permit.  
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

#### **F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region.

- 1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.
- 2. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are as described in this permit.
- 3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly.. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B. 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
  - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
  - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
  - d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.
4. All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.

(9 VAC 5-20-180 C)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.  
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.  
(9 VAC 5-80-110 K.1)

**M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350.. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.  
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

**N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

**O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

**P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 1.

(9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

#### **S. Permit Availability**

Within five (5) days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

#### **T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within thirty (30) days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within thirty (30) days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)

#### **U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the Board of the malfunction within two (2) working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph,

or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### **V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

#### **W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

#### **X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A - F)

#### **Y. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

#### **Z. Changes to Permits for Emissions Trading**

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

#### **AA. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

#### **XVIII. State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor (9 VAC 5 Chapter 40, Article 2)
2. State toxics rule (9 VAC 5 Chapter 60)

(9 VAC 5-40-140, 9 VAC 5-80-110 N, and 9 VAC 5-80-300)